PR-07
PROGRAM REVIEW

INFORMATION TECHNOLOGY
NETC CIO

STRATEGY ALIGNMENT

NETC Goals	CIO / N6 Support of NETC Goals
1. Mission focus and resources aligned to validated current and future Fleet (CFFC) requirements	• **NETC IT infrastructure and applications in alignment to support Sea Warrior single integrated HR processes** • **NTMPS/FLTMPS provides Fleet with a single tool to manage training requirements for deployable battle forces.** • **Through renewed cooperation and commitment, CFFC and NETC are establishing clearer lines of accountability for Fleet and individual training and working together to assess potential future realignments of training organizations and resources.**
2. Provide the right spectrum of best-value learning solutions to support both professional and personal development for Navy mission	• **Fully implement the ILE system architecture to include NIPRNET and SIPRNET** • **Improve data integrity via XML integration of authoritative data sources feeding ILE components** • **NETC's NMCI Program is the primary medium for delivery of NETC IT services and training content, including Navy Knowledge Online and the Integrated Learning Environment**

STRATEGY ALIGNMENT

NETC Goals	CIO / N6 Support of NETC Goals
3. Establish a responsive, accountable and data-driven organization	• **Refine Dashboards for NETC organizations to depict performance based initiatives and metrics driven decisions** • **Provide quantifiable metrics to reflect efficient utilization of IT assets, help desk response time, manpower savings as a result of real time access to knowledge management**
6. Promote a culture of continuous learning in the Navy	• **Provide 24/7 direct access to multiple delivery methods of training (eLearning, VTT, CBT, NCP)** • **Expand Knowledge Management toolset (NKO)** • **Expand Data Mining capability**

PROGRAM AREAS

- **IT Infrastructure**

- **Software Development and Maintenance**

- **Computer Operations**

- **Project Management**

IT Mission Requirement

- **Mission Requirement**
  - **Enabler of Information Technology for Training and Education**
  - **Plans, identifies, acquires and leverages innovative technologies and business practices in support of Navy education and training**
- **Assumptions**
  - **Key Enabler for T&E Programs**
  - **"Backbone" Required to Facilitate RIT Initiatives**

IT Policies

- Clinger Cohen Act of 1996

  - Shapes DoD policy and procedures for IT management and acquisition

- Executive Order 13011 – Federal Information Technology

  - Provides additional guidance on Clinger-Cohen and implementing Paperwork Reduction Act of 1995

- SECDEF Cohen Memorandum Implementing Subdivision E of Clinger-Cohen Act, 2 Jun 1997

  - Defines and clarifies CIO responsibilities

- Title 10, USC, Section 2223

  - Identifies additional responsibilities to DOD CIO & Military CIOs

- SECNAV Instruction 5000.36 "DON Data Management and Interoperability" of 1 Nov 01
- Under Secretary of Navy Memorandum, "Designation of DON Functional Area Managers," of 14 May 02
- ASD (NII) Memorandum dtd 13 Jul 04 (Assistant Secretary of Defense (Networks and Information Integration)) Department of the Navy Support of DoD information Technology Portfolio Review Process

IT Policies

- DON CIO Memorandum dtd 18 Oct 02 Designation of Department of the Navy (DON) Application and Database Management System (DADMS) As an Authoritative Data Source

- SECNAV Memorandum 4 Mar 2003
  - Restructuring of Department of Navy Management of IT
  - Defines roles and responsibilities of Deputy DON CIO (Navy), Deputy DON CIO (Marine Corp), and Echelon II CIOs

- VCNO Message dtd 25 Jul 03 Strategy for Managing Navy Applications and Databases within NMCI

- ASN (Comptroller & Financial Mgt) Memo dtd 28 July 2003
  - Guidance, Preparation, and Submission of FY2005 Program/Budget Estimates for DON Program/Budget Review
  - Certification of Exhibit 300 Capital Investment Report

- DoD Memorandum dtd 13 Jul 2004 Component Support of DoD Information Technology Portfolio Review Process

- ASD (NII) Memorandum dtd 13 Jul 04 (Assistant Secretary of Defense (Networks and Information Integration)) Department of the Navy Support of DoD information Technology Portfolio Review Process

NMCI Policies

- ASN (RD&A) Memo Information Technology Related Procurements dtd 18 Oct 2002

- ASN (RD&A) Memo Information Technology Related Procurements dated 19 Oct 2000

- ASN (RD&A) Memo Information Technology Related Procurements dated 29 Dec 2000

- Commander, Naval Supply Systems Command Memo, Delegation of Authority to Review Information Technology Related Procurements 25 Aug 2003

Network Security

- ASST SECDEF (C4I) Memo 5 Nov 2002 DoD Ports, Protocols, and Services – Increasing Security at the Internet/DISN Boundary

- Navy/Marine Corp Unclassified Trusted Network Protection Policy (Firewall)

- NMCI Security Policy March 2000

- COMNETWARCOM 5239.1 7 Mar 2003 Navy Information Systems Security Personnel Roles & Responsibilities

- DODD 8500.1 dtd 24 Oct 2002 Information (IA)

- DoDI dtd 23 Jan 2003 DoD Information Assurance Strategic Plan

- DoD 8510.1-M 31 Jul 2000 DITSCAP Application Manual

- DoD 8520.2 dtd 1 Por 2004 Public Key Infrastructure (PKI) Enabling

- DoD Directive 8190.3, 31 Aug 2002, 'Smart Card Technology' designates the Common Access Card (CAC) as the preferred hardware token for PKI certificates

- CJCS 6510.1b - covers Information Assurance (DAA responsibilities, Certification Authority, Certification Agent, IAM (ISSM), IAO (ISSO) and SA

IT Strategy

- **Support Sea Power 21 via RIT initiatives**
- **Support Strategic Goals of DON CIO / NETC**
- **Enhance the Integrated Learning Environment**
- **Exploit Knowledge Management practices**
- **Maintain Network Security, IAVA/M, ISSM efforts**
- **Comply with NMCI implementation requirements**
- **Reduce legacy applications via CNO FAM**
- **Maintain operational support for legacy applications**

RESOURCES SUMMARY PROFILE
Civilian Manpower

Work Years *	FY06	FY07	FY08	FY09	FY10	FY11
NETC CIO	16	16	16	16	16	16
NETPDTC	120	120	120	120	120	120
NPDC	75	75	75	75	75	75
CNATRA	2	2	2	2	2	2
NSTC	6	6	6	6	6	6
NWC	28	28	28	28	28	28
NPGS	76	76	76	76	76	76
HPC	1	1	1	1	1	1
NETSAFA	4	4	4	4	4	4
Other (Interns)	14	14	14	14	14	14
Total	341	341	341	341	341	341

RESOURCES SUMMARY PROFILE
NETC & NETPDTC Civilian Manpower

	FY06	FY07	FY08	FY09	FY10	FY11
PROGRAM AREAS						
Infrastructure	46	46	46	46	46	46
Software Development	53	53	53	53	53	53
Computer Operations	5	5	5	5	5	5
Project Management	32	32	32	32	32	32
Total	136	136	136	136	136	136

RESOURCES SUMMARY PROFILE
IT Contractor Support

	FY06	FY07	FY08	FY09	FY10	FY11
CONTRACTOR						
Required	301	301	301	301	301	301
Funded	301	301	301	301	301	301
Delta	0	0	0	0	0	0

	FY06	FY07	FY08	FY09	FY10	FY11
PROGRAM AREAS						
Infrastructure	210	210	210	210	210	210
Software Development	52	52	52	52	52	52
Computer Operations	19	19	19	19	19	19
Project Management	20	20	20	20	20	20

Contractor number includes All IT Contractor Support at all sites

RESOURCES SUMMARY PROFILE
O&MN Funding

	FY06	FY07	FY08	FY09	FY10	FY11
Required	$43.0M	$43.0M	$46.0M	$48.0M	$49.6M	$51.3M
Funded	$43.0M	$43.0M	$46.0M	$48.0M	$49.6M	$51.3M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Major Cost Drivers Caused by**
  - **Legacy networks required due to NMCI's shortcomings**
  - **Required retooling of IT Systems to support RIT Objectives**

STATUS OF NEW BUSINESS INITIATIVES

- **ILE (Integrated Learning Environment)**

- **NETS (Navy Enterprise Training Strategy)**

- **NKO (Navy Knowledge Online)**

- **Enterprise Classroom Strategy**

- **BTS (Blended Training Solution)**

- **TAMS (Training Asset Management System)**

- **NTIP (Navy Training Infrastructure Plan)**

- **IA (Information Assurance)**

- **NMAPS (NETC Military Awards Processing System)**

CIO Efficiencies

Current

- Continuing to reduce programs of record
- Reducing number of Legacy Applications (COTS/GOTS)
- Reducing military awards processing time using NDAWS
- Implemented paperless document management (NDMAN)
- Enabled Schoolhouse efficiencies via ILE
- Building an enterprise training intranet

Future

- Expand the use of XML Web Service in our major business process applications
- Implement Enterprise help desk.
- Optimize blended training schedules with Fleet requirement basis
- Provide validated ECR usage metrics
- Enhance requirements capabilities by interfacing with NAVSEA ship configuration data (NTMPS)
- Align quota reservation process with existing student management functions
- Working with NETC N9 & Center for Navy Leadership to develop a prescriptive leadership assessment tool (DON CIO e-Business)

IT END PRODUCTS

- **Overall Assessment**
  - **Increased efficiency and ease of IT for end users**
    - Improved data integrity, quality and timeliness
    - Reduced duplication of data bases and enhanced internal interfaces
    - Provided web enabled applications with global accessibility
  - **Effectiveness of Methodology**
- **Improvement Opportunities**
  - **Factors Which Impact Product**
    - Timeliness of Requirements
    - Changing Environment
    - Lack of Consensus
    - NMCI Timelines & Constraints
- **Risk - Varies from Low to High depending on investment**
  - **Potential consequences**
    - Misdirected investments
    - Less efficient solutions

MEASURING OUTPUT QUALITY

- **Overall Assessment**
  - **Quality determined by IT Resource availability**
  - **Evaluate Effectiveness of Methodology**
    - **NMCI SLAs**
    - **Dashboard - eLearning Stats, NTMPS Stats**
    - **Help Desk Statistics**
    - **System Resource Statistics**
    - **User Feedback**
  - **Determine Extent to Which HPSM Applied**
    - **More intelligent user interface**
    - **Razorfish Scientific Methodology being applied to NKO**
- **Improvement Opportunities**
  - **Factors Making Product Quality Measurement Difficult**
    - **No concise set of business process rules**
    - **Surveys are insufficient**
    - **Quality indicators visible on mission side vice IT side**
    - **Lack of complete and accurate data**
  - **Identify Potential Improvements to Product Quality**
    - **ILE functional analysis study**
- **Risk - Low**
  - **Risks of Not Effectively Measuring Product Quality**
    - **Failure to meet Fleet requirements**
    - **Less than optimal investments**
    - **Ineffective use of Manpower**

IT UNFUNDED ISSUES

- **Issue 1: Electronic Classrooms**

- **Issue 2: NKO Afloat**

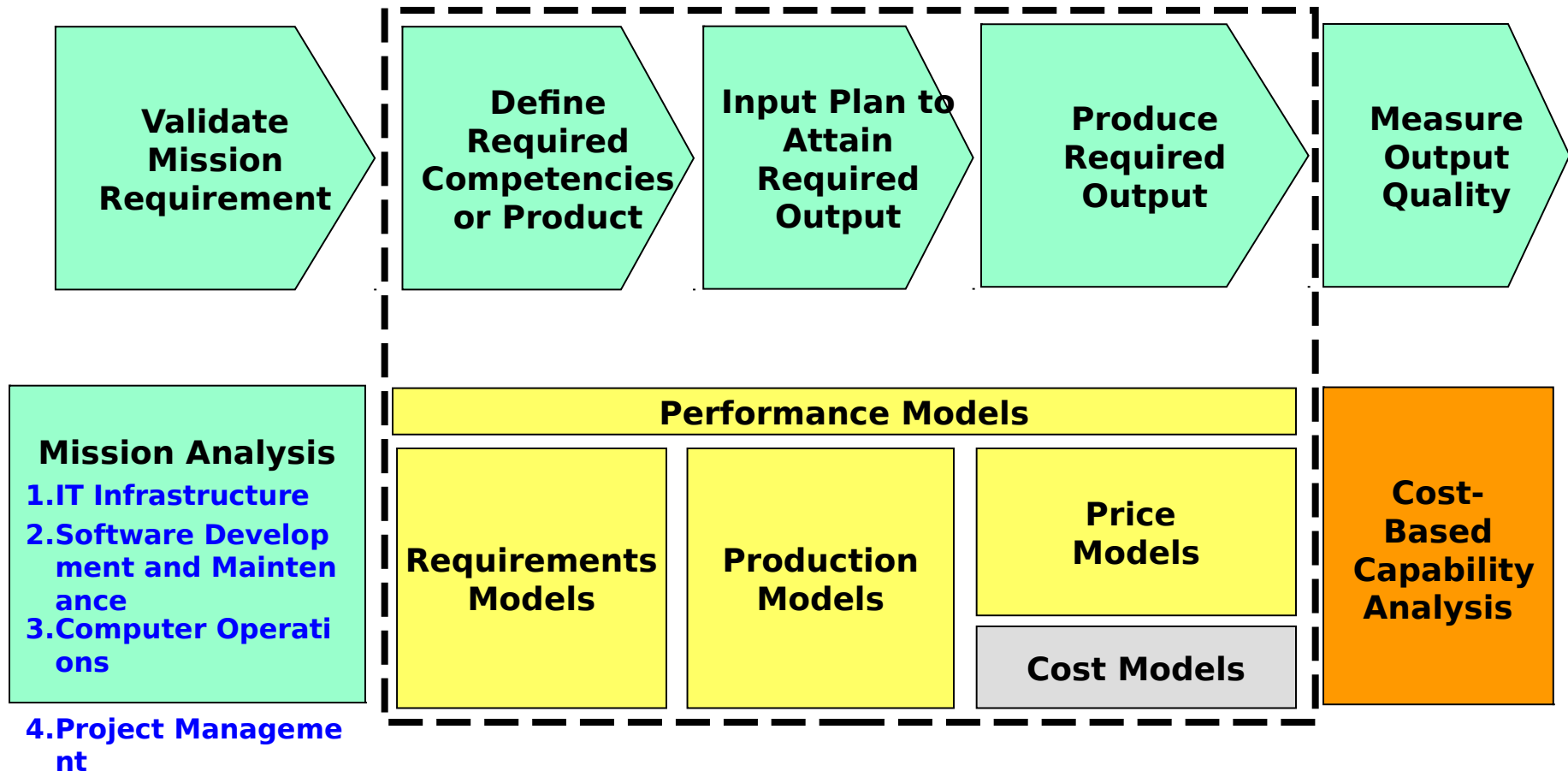- **Issue 3: Enterprise Data Center COOP**

NMCI UNFUNDED ISSUES

- **Issue 1: NMCI Classroom Solution (Phase III)**

- **Issue 2: USNA, NPS and NWC NMCI Requirement**

- **Issue 3: NMCI Infrastructure Requirement from MIL CON**

- **Issue 4: NMCI Voice Over Intranet Protocol (VOIP) Services**

- **Issue 5: NETC Server Migration to NMCI**

ASSESSMENT APPROACH

| Requirement | Product | Demand Basis for Production Plan | Production Plan | Output & Feedback |

Identify and Assess Processes and Outputs of Key Business Sectors

Validate Mission Requirement → Define Required Competencies or Product → Input Plan to Attain Required Output → Produce Required Output → Measure Output Quality

Mission Analysis
1. IT Infrastructure
2. Software Development and Maintenance
3. Computer Operations
4. Project Management

Performance Models

Requirements Models | Production Models | Price Models

Cost Models

Cost-Based Capability Analysis

Evaluate Interdependencies of Business Sectors Via Modeling

LINKED SLIDES

BTS Initiative Status (Blended Training Solution)

Provides optimal, real time solutions for multiple training demand signals. Provides forecasting, sequencing, managing, and optimizing a wide variety of training resources across a range of facilities and time zones. Supports multiple instructional delivery methods and resource management.

Initial Concept Plan (ICP) Requirements Documentation	**Complete**
System Design Document (SDD) and Concept of Operations (COO) documentation	**In Progress**
The "prototyping" phase consists of 4 parallel paths to IOC: 1)sequencing & scheduling demonstrates how the system works within the ILE, 2) web services, 3) NKO front-end, and 4) 5VM/CMS.	**2nd Qtr FY05**
Modeling and simulation for shortest path and least cost.	**IOC FY06**
FOC and initial deployment across the enterprise.	**FY07**

Integrated Learning Environment ILE Initiative Status

The Integrated Learning Environment (ILE) standardizes and integrates the requirements, systems, and network architecture to support the Fleet, the Sailor, the Learning Centers, the schools, the training managers, and the civilian workforce.

- **LMS**

    A system to improve and support job performance and mission readiness by providing high quality learning and performance support available anytime and anywhere via the Web.

- **LCMS**

    The LCMS is a content management system that organizes and stores eLearning content in a reusable format to reduce duplicate efforts and waste. The current offering allows for Level 1 curriculum development, making content development easier for the novice.

- **5VM**

    The 5VM aligns job opportunities with individual competencies using five defined quantities: personal development; professional development; leadership; warfighting qualifications and civilian certifications; and overall performance.

Conclusion

LMS
Initiative Status

Achieve FOC for enterprise NIPRNET LMS capability.	**1st Qtr FY05**
Achieve FOC for enterprise SIPRNET LMS capability.	**1st Qtr FY05**
Achieve a tighter integration between LMS and SMS for JTA Level I and II data.	**2nd Qtr FY05**
Perform complete functional analysis for ILE that defines all system requirements and capabilities.	**2nd Qtr FY05**
Accomplish LMS/LCMS/Repository recompete for enterprise contracts.	**4th Qtr FY05**
Support all Navy Advanced Schoolhouse E-Learning Content	**1st Qtr FY07**
Achieve FOC for dynamic content delivery for surface/subsurface vessels afloat	**1st Qtr FY08**
Support all Navy SysCom E-Learning Content	**1st Qtr FY09**
Achieve functional interface for distributed content to support the enterprise solution for 1.2	**FY08 – FY11**

LCMS
Initiative Status

Achieve FOC for enterprise NIPRNET LCMS capability.	**1st Qtr FY05**
Achieve FOC for enterprise SIPRNET LCMS capability.	**1st Qtr FY05**
Achieve a tighter integration between LMS and LCMS for the delivery of ILE content.	**2nd Qtr FY05**
Accomplish LMS/LCMS/Repository recompete for enterprise contracts.	**4th Qtr FY05**
Achieve functional interface for distributed content to support the enterprise solution for 1.2 mil customers through phased implementation	**FY08 – FY11**

5VM
Initiative Status

Achieve a tighter integration between LMS and LCMS for the delivery of ILE content.   **2nd Qtr FY05**

Enhance infrastructure to support required capacity for all enlisted and officer rates for 5VM and SMS   **4th Qtr FY05**

Enhance infrastructure to support required capacity for civilians   **FY07 - FY08**

Analyze/deploy a phased approach for intelligent interaction/prescription competencies based on user goals   **FY08 - FY11**

CONCLUSION

- **Program Status**
  - **Infrastructure is fully aligned to support remaining FY05 A School Course Conversions and will expand accordingly as SYSCOM and C School conversions are received**

- **Achieve Program Goals**
  - **Goal achievement based on approved out year funding to fully support milestones, increased user base, architecture expansion and functional requirements**
  - **Timely and effective competency requirements from Echelon III commands will be essential for program milestone/goal success.**

- **Program Risk**
  - **Infrastructure positioning relies heavily on the identification of accurate requirements by NPDC and SYSCOMS**
  - **Relies heavily on NMCI delivery**

Navy Enterprise Training Strategy (NETS) Initiative Status

NETS provides the Strategy for integrating training information systems which perform functions related to the Integrated Learning Environment (ILE).

Initial rationalization of legacy training systems migration and network integration, functional taxonomy, and requirements for new integration strategy.	**Complete**
Establish a NETS Integration Panel to assist in constructing the NETC IT architecture in an XML environment using a strategic Web Service design.	**Complete**
Conduct NETS governing conferences, review NETS with ILE IPT, NOOT (T&E FAM), key MPT Systems Managers, and consumers of data to determine critical interfaces, business logic, and authoritative data sources.	**Ongoing**
Develop and leverage ILE web services to enhance information exchange in a real time environment using XML.	**IOC FY06**
Continue Web Service development until ILE is Fully Operational and in alignment with NETS design in preparation for the DIMHRS Training Modules.	**FOC FY07**

TAMS Initiative Status

Provides a centralized inventory management tool for real time data collection/distribution and visibility of assets. Utilizing scheduling and resource optimization data, provides a view of classrooms and seat availability. Centralized help desk tracks and organizes responses to service calls and provides analysis to evaluate maintenance parts and manpower costs.

Conduct User Training, Systems Test and Acceptance and Achieve IOC	1st Qtr FY05
Achieve FOC	2nd Qtr FY05
Analyze viability of migrating CENTRA to TAMS	4th Qtr FY05
Achieve IOC for TTE enterprise management	FY06
Achieve Full integration with BTS	FY07

Navy Knowledge Online (NKO)

Single point of entry and access to the Navy's Integrated Learning Environment (ILE) within which a user may create an individualized training plan, take web based training courses and track course progress and to enable users to review their career 5-Vector Model and collaborate with other peers via Instant Messaging and Message Boards

Add new communities	**1st Qtr FY05**
Interim NKO afloat (10 ships)	**1st Qtr FY05**
Enhance to improved, more intuitive navigation	**2nd Qtr FY05**
Add Business Process Workflow Application	**3rd Qtr FY05**
Add Whiteboarding Application	**3rd Qtr FY05**
NKO afloat (103 ships)	**4th Qtr FY06**
NKO afloat (remaining ships)	**4th Qtr**

Information Assurance (IA)

Operations that protect and defend information and information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation.

Acquire NSA/NSTISSI IA Courses for DON IA personnel	**2nd Qtr FY05**
Provide C&A Training via NNWC & NPS	**1st Qtr FY05**
Reengineer Information Systems Security Manager (ISSM) Network Security Vulnerability Technician (NSVT) IA courses for all Department of Navy (DON)	**4th Qtr FY05**
Implement Automated Systems Security Authorization Agreement	**4th Qtr FY05**
CeNET SSAA Renewal	**1st Qtr FY06**

NDAWS/NMAPS

NMAPS upgrade is being considered by the Director of Navy Staff (DNS) CIO as a baseline system to develop a Navy-wide electronic processing system as part of the Navy Department Awards Web Service (NDAWS).

NDAWS is an initiative to fully automate unit and personal military awards processing Navy-wide from initiating an award recommendation to archiving of approved awards.

Redesign HQMC Awards Processing System to meet NETC requirement and conduct test and evaluation.	COMPLETE
Implement NMAPS claimancy wide.	COMPLETE
NMAPS upgrade design to migrate from Lotus Notes to ASP.NET provides a total web-based system including database and content management and eliminates the need for client software.	COMPLETE
NMAPS test and evaluation.	1st Qtr FY05
NMAPS upgrade implemented throughout NETC claimancy.	1st Qtr FY05
NMAPS test and evaluation to integrate into NDAWS phase 1	2nd Qtr FY05
NMAPS and NDAWS integrated into single processing, archival, and retrieving system.	1st Qtr FY06

NTIP Link
(Navy Training Infrastructure Plan)

Uses the Regional Shore Infrastructure (RSIP) goals and processes as a guide to provide a plan that will guide future development of training infrastructure at Navy installations. The NTIP Portal is the definitive source for NETC training infrastructure.

Develop functional goals and specifications documentation. Develop system design document showing how web service will interface with iNFADS, TAMS, CETARS and the Concept of Operations (COO).	In Progress
IOC to include interface with iNFADS and Geographical Information System capabilities	1st Qtr FY05
Establish interfaces with TAMS and CETARS	4th Qtr FY05
Develop tools for automated updating of facilities and classroom data	2nd Qtr FY06
Integrate Regional Capacity Planning functionality	4th Qtr FY06
Achieve FOC and begin deploying across the enterprise	FY07

Enterprise Classroom Strategy

Connect and standardize the classroom equipment and layout to multi-purpose configuration, resulting in decreased need for additional classrooms in the out years. Consolidate maintenance contracts maximizing volume discounts.

Define classroom layout requirements	**In Progress**
Begin building training intranet	**In Progress**
Identify all current maintenance contracts	**FY05**
Consolidate Contract Maintenance	**FY06**
Formalize process for gathering new classroom requirements	**FY06**

NMCI Unfunded Issue 1

NMCI Classroom Solution

- Project Requirement: NMCI to assume/provide certain percentage of NETC IT Classroom support
- Project's Current Status
  - Requirements submitted, due diligence underway
  - FY05Q2 Prototype Implementation
  - FY05Q3 Contract Award
- Potential Funding Requirement
  - Estimated $50-70M annually beginning in FY06
  - Performing Total Cost of Ownership (TCO) Analysis
- Risk: High

NMCI Unfunded Issue 2

.EDU NMCI Requirement

- Project Requirement: Fund NMCI services to NPS and NWC
- Project's Current Status
  - .EDU BCA for NMCI exclusion currently being evaluated by Navy leadership
- Potential Funding Requirement
  - Total seat requirement may be 3,000 seats
  - Estimated $8-10M annually beginning in FY06
- Risk: Medium

NMCI Unfunded Issue 3

NMCI Infrastructure Requirement from MILCON

- Project Requirement: NAVFAC/CNI requires tenant Claimant to fund NMCI infrastructure from MILCON

- Project's Current Status
  - In FY04, $225K spent for NMCI Infrastructure resulting from MILCON projects
  - NETC has limited advanced visibility into MILCON schedule
  - Hard to estimate NMCI Infrastructure cost in advance

- Potential Funding Requirement
  - Typical year estimated at $100-500K
  - FY05 MILCON impact may be substantial ($1M+?) due to Hurricane IVAN recovery

NMCI Unfunded Issue 4

NMCI Voice Over Intranet Protocol (VOIP) Services

- Project Requirement: NMCI to begin providing VOIP services
- Project's Current Status
  - NETC VOIP deployment date undetermined
- Potential Funding Requirement
  - Rough Order of Magnitude - $11M annual cost
- Risk: Medium

NMCI Unfunded Issue 5

NETC Server Migration to NMCI

- Project Requirement: NETC planning to consolidate Claimancy servers and migrate them to NMCI

- Project's Current Status
  - NETC conducting legacy server data call to ascertain scope in order to develop consolidation plan
  - 2,200 NETC servers currently identified within Claimancy

- Potential Funding Requirement
  - Rough Order of Magnitude: $2.3M annual cost beginning FY06

Electronic Classroom Unfunded

- Project Requirement: Electronic Classrooms required for RIT objectives
- Project's Current Status
  - 15,000 Student Seats
- Echelon III Requirements
  - NPDC - 100 classrooms/yr
  - CNATRA - 16 classrooms/yr
  - NSTC - 360 cadet seats
- Potential Funding Requirement
  - Rough Order of Magnitude: $19M FY06; $19M FY07
- Risk: Medium
  - N6 unable to validate requirements

NKO Afloat Unfunded

- Project Requirement: Afloat infrastructure to meet accelerated Distance Support schedule
- Project's Current Status
  - Interim afloat solution - December 04
  - NAVSEA requesting NETC share Distance Support infrastructure costs
- Potential Funding Requirement
  - Rough Order of Magnitude: $5.5M FY06; $2.5M FY07 $1.5M FY08 - FY11
- Risk: High

Enterprise Data Center COOP Unfunded

- Project Requirement: Continuance of Operations Plan (COOP)
- Project's Current Status
  - Partial solution fielded building 749
    - Current COOP reutilizes hardware
  - RIT objectives require more robust solution
- Potential Funding Requirement
  - Rough Order of Magnitude: $6.5M FY06 - FY11
- Risk: High
  - Expected failover tolerance exceeds funding

IT INFRASTRUCTURE

- **NMCI**

  - Enterprise-wide IT initiative to provide voice, video and data connectivity in order to better support the critical war fighting missions of Navy and Marine Corps forces.

- **Legacy**

  - Provides the operational maintenance of legacy IT applications, life cycle maintenance, and hardware in support of the NAVEDTRACOM training mission.

- **RIT Infrastructure**

  - Infrastructure to support Sea Warrior (Skillsnet, 5VM, CMS) and ILE (LMS, LCMS, NKO, BTS) with changes to Legacy Systems

SOFTWARE DEVELOPMENT AND MAINTENANCE

- **LMS Learning Management System**

  - Improves and supports job performance and mission readiness by providing high quality learning and performance support available anytime and anywhere via the Web.

- **LCMS Learning Content Management System**

  - Organizes and stores eLearning content in a reusable format to reduce duplicate efforts and waste. The current offering allows for Level 1 curriculum development, making content development easier for the novice.

- **NKO Navy Knowledge Online**

  - Single point of entry and access to the Navy's Integrated Learning Environment (ILE) within which a user may create an individualized training plan, take web based training courses and track course progress and to enable users to review their career 5-Vector Model and collaborate with other peers via Instant Messaging and Message Boards

- **TAMS Training Asset Management System**

  - Provides a centralized inventory management tool for real time data collection/distribution and will provide real-time visibility of assets, and through the scheduling and resource optimization, a view of classrooms and seat availability. TAMS also features a centralized help desk to track and organize response to service calls and provide analysis to evaluate maintenance parts and manpower costs.
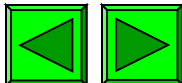
SOFTWARE DEVELOPMENT AND MAINTENANCE

- **BTS Blended Training System**

  - A comprehensive system for providing optimal, real time solutions for multiple training demand signals through sequencing, resource management, and modeling & simulation of training activities and e-learning events

- **CeTARS Corporate enterprise Training Activity Resource Systems**

  - Authoritative source of all formal Navy training event data including course description, master course schedules, plans/requirements and statistical information, student and training information, and supports training site management and administrative functions

- **NTMPS Navy Training Management and Planning System**

  - Consists of integrated data from more than thirty Navy data sources including data on courses, training workload, attrition, instructors, personnel, funding, training overhead, equipment acquisition and inventory, facilities, and training status of operating units.

- **NTIP Portal Navy Training Infrastructure Plan**

  - Uses the Regional Shore Infrastructure (RSIP) goals and processes as a guide to provide a plan that will guide future development of training infrastructure at Navy installations. The NTIP Portal is the definitive source for NETC training infrastructure.

COMPUTER OPERATIONS

- **Operate Legacy Computers**
- **Operate Training COI**
- **Operate Help Desks (Excluding NMCI)**
- **Operate Enterprise Data Center**

NETPDTC provides mission critical support to the NETC claimancy in the form of a NETC Enterprise Data Center (EDC) located at Saufley Field Pensacola Florida and a Continuity of Operations (COOP) Center at Naval Air Station Pensacola Florida.

The NETC EDC hosts the Saufley Field NMCI B2 boundary. This connection provides access for all Navy NMCI users taking training courses or using training management data. NMCI also provides the connection between NMCI infrastructure and the NETC Training Community of Interest (COI). The NETC Training COI connects 19,000 student workstations in 3000+ Navy classrooms in 750+ buildings on 50+ bases to the training delivery systems and content located in the NETC EDC at

PROJECT MANAGEMENT

- **Echelon II - NETC CIO**
  - **Enterprise Policy**
  - **Program Management Oversight**
  - **Resource Administration & Priorities**
  - **Contracts/Service Level Agreements**
  - **Information Assurance Policy**
- **Echelon III**
  - **Project Management**
    - **Functional Requirements**
    - **Business Rules/Processes**
    - **Standards**
    - **Data Integrity**
  - **Technical Support**
    - **Enterprise Connectivity**
    - **Operations Support**
    - **Systems Security**
    - **Architecture Design**
    - **Help Desk**

IT INFRASTRUCTURE
Analysis Results

- **Defined**

- **Validate Mission Requirement**

- **Define End Products**

- **Demand Basis for Input Plan**

- **Develop Production Capability**

- **Measure Output Quality**

PRODUCE REQUIRED OUTPUT

- **Overall Assessment**
  - **Increased efficiency and use of IT applications for end users**
  - **NMCI Seat Service for all who need**
  - **Sufficient legacy servers for quick response**
- **Improvement Opportunities**
  - **Factors Which Impact Product Definition**
    - **Conflicting Policies, Strategies, Priorities**
    - **Emergent Requirements**
    - **Changing Environment**
    - **Lack of clear and concise business rules**
    - **NMCI Timelines**
  - **Address Potential Reductions in Capacity and Infrastructure**
    - **Server consolidation**
    - **Military end strength reductions**
    - **Flexible training environment (i.e. multi-purpose classrooms)**
- **Address 5 Percent TOA Reductions – Strategy and Impact**
  - **Analyzing vertical and horizontal potential reductions**
- **Risk – High**
  - **Requirements increasing at faster rate than resources**

O&MN

INPUT PLAN
Program Area - IT Infrastructure

- **Overall Assessment Drivers**
  - **NMCI mandated (Training COI connectivity, user desktop)**
  - **Electronic training delivery methods**
  - **Data Center infrastructure determined by demand**
- **Improvement Opportunities**
  - **Server consolidation**
  - **NMCI tools to further reduce legacy infrastructure**
  - **Timeliness of classroom requirements**
  - **Business Rules for NMCI growth**
- **Risk – High**
  - **N6 unable to validate all requirements**
  - **Unknown technology based on contractor claims**
  - **NMCI seat requirement initially baselined on number of legacy systems**
    - **Seat requirement continues to grow**

NMCI
Projected Workload

Category	FY06	FY07	FY08	FY09	FY10	FY11
Seats	$55.7M*	$58.5M*	$61.4M*	$64.5M*	$67.7M*	$71.1M*
Classified Connectivity	$5.0M	$5.25M	$5.51M	$5.79M	$6.08M	$6.38M
CLIN 23 Options	$1.3M	$1.37M	$1.43M	$1.51M	$1.58M	$1.66M
Classroom Connectivity	$2.0M	$2.31M	$2.43M	$2.55M	$2.67M	$2.81M
Classroom Project	$65M**	$68.25M**	$71.66M**	$75.25M**	$79M**	$82.95M**

Assumes a 5% year growth factor in all categories
*AEGIS Commands gain will increase annual budgetary workload by $2M starting in FY06
**NMCI Classroom seats are an unfunded requirement expected to begin in FY06
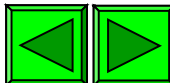
ECR INSTALLATION
FY06 Projected Workload

Equipment	Number of Equipment	Number of Seats	Classrooms with Internet Connectivity	Classrooms with Intranet Connectivity
A-AEC				
I-AEC				
LRC				
MPEC	66	1650	66	66
PTC				
IPS / IPC				
LRC	50	1250	50	50
Other				
Total Assets	116	2900	116	116
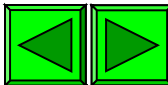
ECR INSTALLATION
FY07 Projected Workload

Equipment	Number of Equipment	Number of Seats	Classrooms with Internet Connectivity	Classrooms with Intranet Connectivity
A-AEC				
I-AEC				
LRC				
MPEC	66	1650	66	66
PTC				
IPS / IPC				
LRC	50	1250	50	50
*Other	360	360	360	360
Total Assets	476	3260	476	476

*Workstations in quarters for Cadets at NSTC
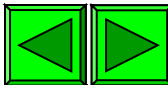
ECR- LIFE CYCLE SUPPORT
FY05 Projected Workload

Equipment	Number of Equipment	Number of Seats	Classrooms with Internet Connectivity	Classrooms with Intranet Connectivity
A-AEC	805	11,231	199	335
I-AEC	688	688	164	153
LRC	183	2,918	53	53
NIDA	79	1,729	0	71
PTC	878	878	194	194
IPS / IPC	282	1,796	226	263
LAB	7	110	2	2
Other	106	214	4	4
Total Assets	3,028	19,564	842	1,075

Number of Buildings – 236 (171 with network connectivity)
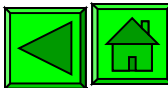
IT INFRASTRUCTURE
O&MN Funding

PE / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$179.7M	$187.6M	$180.2M	$187.5M	$195.6M	$204.2M
Funded	$83.5M	$84.4M	$82.3M	$83.9M	$85.9M	$88.0M
Delta	$96.2M	$103.2M	$97.9M	$103.6M	$109.7M	$116.2M

NMCI   **Enterprise Data Center**   **Electronic Classroom**

NMCI
O&MN Funding

PE / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$129M	$135.7M	$142.4M	$149.6M	$157M	$164.9M
Funded	$58.4M	$58.4M	$51.0M	$52.5M	$53.8M	$55.2M
Delta	$70.6M	$77.3M	$91.4M	$97.1M	$103.2M	$109.7M

Funding Status - Capability at Current Funding Profile (FY07)

- Shortfalls must be supported from within command
- Program de-obligations being used to meet unfunded NMCI requirements
- Annual NMCI de-obligations available is decreasing each year

Potential Initiatives to Reduce Program Costs

- Reduction/Elimination of high-end NMCI options

• FY06-07 Risk Assessment

- Medium, High if mandated to use NMCI for Classroom support

Submitted as Priorities 1 - 5 Unfunded NMCI Issues

Future Undetermined Costs – NMCI VOIP services and

Enterprise Data Center
O&MN Funding

PE / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$10.9M	$11.2M	$11.7M	$12.0M	$12.0M	$12.0M
Funded	$4.4M	$4.7M	$5.2M	$5.5M	$5.5M	$5.5M
Delta	$6.5M	$6.5M	$6.5M	$6.5M	$6.5M	$6.5M

- **Discuss Funding Status**
  - **Training COI - Connectivity**
  - **COOP**
  - **New server requirements/initiatives**
- **Potential Initiatives to Reduce Program Costs**
  - **COOP failover thresholds directly related to available funding**
- **FY06-07 Risk Assessment – High**
  - **Potential impact on training mission if critical systems are not available**
- **Submitted as Priority 3 of 3 Unfunded Issues**

ELECTRONIC CLASSROOM
O&MN Funding

PE / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$39.8M	$40.7M	$26.1M	$25.9M	$26.6M	$27.3M
Funded	$20.7M	$21.2M	$26.1M	$25.9M	$26.6M	$27.3M
Delta	**$19.1M**	**$19.5M**	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status (includes maintenance, refresh, new installs)**
  - **Increased costs in FY06, FY07 due to new classrooms required for ILE**
    - **ILE requires more advanced classrooms which increase classroom costs**
    - **CIO will begin funding new classrooms for CNATRA**
    - **Converting I-AECs to MPECs**
    - **NSTC requesting computers in cadet barracks**
- **Potential Initiatives to Reduce Program Costs**
    - **Consolidation of maintenance costs**
    - **Standardization of classroom configuration**
    - **Classroom requirements validation model**
    - **Redirection of classroom funding from other Claimancies**
- **FY06-07 Risk Assessment – High**
    - **NMCI cost impact**
    - **Ability to move funds when we consolidate maintenance contracts**
    - **CNI funding infrastructure for new classrooms**
- **Submitted as Priority 1 of 3 Unfunded Issues**

SOFTWARE DEVELOPMENT AND MAINTENANCE
Analysis Results

- **Defined**

- **Validate Mission Requirement**

- **Define End Products**

- **Demand Basis for Input Plan**

- **Develop Production Capability**

- **Measure Output Quality**

INPUT PLAN

Program Area – Software Development And Maintenance

- **Overall Assessment**
  - **Maximize use of COTS technology**
  - **Maximize use of Web Services**
  - **FAM approval and NMCI compliance**
- **Improvement Opportunities**
  - **ILE functional analysis**
  - **Continue consolidation of like applications**
  - **Migration of applications based on FAM rationalization**
- **Risk - Medium**
  - **Define Risks of Inaccurate Input Projections**
    - **Custom software requirements vs COTS out of box**
    - **DON Policy lengthens timeline**

PRODUCE REQUIRED OUTPUT

Program Area – Software Development And Maintenance

- **Overall Assessment**
  - Increased efficiency and use of IT applications for end users
  - Configuration Maturity Model (CMM) standards being applied to application development
  - Using user feedback/forums to drive changes
  - Web-enabled applications
- **Improvement Opportunities**
  - **Factors Which Impact Product Definition**
    - Conflicting Policies, Strategies, Priorities
    - Lack of clear and concise business rules
    - Reducing duplication of databases between applications
    - Reducing number of internal interfaces
  - **Address Potential Reductions in Capacity and Infrastructure**
    - Application consolidation
    - Increased use of COTS; decreased use of GOTS
- **Address 5 Percent TOA Reductions – Strategy and Impact**
  - Analyzing vertical and horizontal potential reductions
- **Risk – Medium**
  - Requirements increasing at faster rate than resources
  - Requirements creep

O&MN

SOFTWARE DEVELOPMENT AND MAINTENANCE
Legacy O&MN Funding

0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$47.9M	$45.1M	$46.7M	$47.9M	$50.9M	$53.7M
Funded	$41.0M	$41.4M	$43.9M	$45.0M	$47.9M	$50.7M
Delta	$6.9M	$3.7M	$2.8M	$2.9M	$3.0M	$3.0M

- **Discuss Funding Status**
  - **Costs are for transformation of legacy systems to meet RIT objectives**
  - **Unfunded costs represent NKO Afloat, 5VM, and NTIP**
- **Potential Initiatives to Reduce Program Costs**
  - **Recompete contracts to drive down costs**
  - **Extend deployment timelines**
- **FY06-07 Risk Assessment – High**
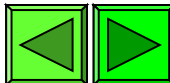
BTS
O&MN Funding

PE / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$.4M	$.3M	$.3M	$.2M	$.2M	$.15M
Funded	$.4M	$.3M	$.3M	$.2M	$.2M	$.15M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Status**
  - Decrease cost in project management resulting from contract re-compete in FY05
  - Increased manpower requirement for admin/DBA/web support of expanding e-business server farm
  - Schedule and optimize blended training for schoolhouse operations and Fleet demands
- **Potential Initiatives to Reduce Program Costs**
  - Decrease cost in software development with adoption of FAM approved COTS applications and best business practices application throughout the Navy.
  - Efficiencies gained using Web enabled processes via XML Interfaces (ASP.NET)
- **FY06-07 Risk Assessment** – **High**

CeTARS
O&MN Funding

PE / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$10.2M	$10.7M	$11.3M	$11.8M	$12.3M	$12.3M
Funded	$10.2M	$10.7M	$11.3M	$11.8M	$12.3M	$12.3M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Status:**
  - Includes addition of TOURS & NTQMS Functionality, remaining NTRS capability, and web services to support ILE
  - Reduced software development cost as number of course convert from traditional to e-Learning
- **Potential Initiatives to Reduce Program Costs**
  - Decrease cost in software development resulting from CENTRA module (migrated to TAMS), and PEM publication module migration to a content management repository
  - Efficiencies gained using Web enabled processes via XML Interfaces (J2EE) vice Oracle Forms
- **FY06-07 Risk Assessment** – **High**
  - Authoritative data source for training events (mission critical system)
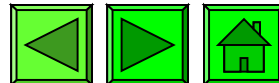
E-Business O&MN Funding Summary

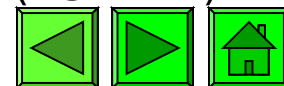| 0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$0.7M	$0.7M	$0.6M	$0.5M	$0.5M	$0.5M
Funded	$0.7M	$0.7M	$0.6M	$0.5M	$0.5M	$0.5M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Status**
  - Decrease cost in project management resulting from contract re-compete in FY05
  - Increased manpower requirement for admin/DBA/web support of expanding e-business server farm
- **Potential Initiatives to Reduce Program Costs**
  - Decrease cost in software development with adoption of FAM approved COTS applications and best business practices application throughout the Navy
  - Efficiencies gained using Web enabled processes via XML Interfaces (ASP.NET / J2EE)
- **FY06-07 Risk Assessment** – **Low**
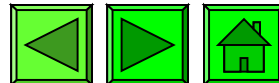
TAMS O&MN Funding Summary
($M)

0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$0.7M	$0.7M	$0.7M	$0.6M	$0.6M	$0.6M
Funded	$0.7M	$0.7M	$0.7M	$0.6M	$0.6M	$0.6M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - Increased costs in FY06, FY07 for interfaces, maintenance & expansion of system
    - Initial development of interfaces with CENTRA, NTIP, DPAS, BTS, etc. increases costs; however, savings can be achieved by reducing duplicative databases and data entry in multiple applications
    - Require additional manpower for admin/DBA/web support
- **Potential Initiatives to Reduce Program Costs**
  - Study the impact of delaying interfaces and expansion to Training Support Detachments.
  - Standardization of application throughout enterprise
- **FY06-07 Risk Assessment** – **High**
  - Delay will impact BTS scheduling initiative
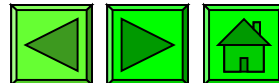
NTMPS O&MN Funding

0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$6.1M	$6.4M	$6.7M	$7.0M	$7.3M	$7.7M
Funded	$6.1M	$6.4M	$6.7M	$7.0M	$7.3M	$7.7M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Funding Status**
  - **Maintain current functions such as NTMPS Afloat, FLTMPS, ETJ, Integrated Battle Force Training (IBFT), special reporting functions, and HPC interfaces**
  - **Implementation of classified data warehouse (SIPRNET) & other data sources**
  - **Integration of non-enterprise NETC DBs & non-military, commercial DBs**
  - **Support of TYCOM requirements management and enterprise dashboards**
- **Potential Initiatives to Reduce Program Costs**
  - **No new data sources integrated into the warehouse to support ETJ and Certs/Quals**
  - **Cease classified data warehouse development, including interface with fleet classified systems**
  - **No further web service development to support Sea Warrior/5VM**
- **FY06-07 Risk Assessment - High**
  - **Funding reductions will limit ability to support RIT, Fleet requirements**
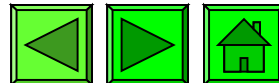
NKO O&MN Funding

0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$8.2M	$6.6M	$6.2M	$5.1M	$5.2M	$5.3M
Funded	$8.2M	$6.6M	$6.2M	$5.1M	$5.2M	$5.3M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - **Fully funded except for NKO Afloat**
  - **Enhance application to include Workflow and Whiteboarding**
  - **Continue to build and improve KM communities**
  - **Continue to improve user navigation**
- **Potential Initiatives to Reduce Program Costs**
  - **Slow down enhancements that require custom software**
  - **Extend SIPRNET and Afloat deployment timeline**
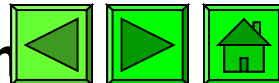
NKO Afloat O&MN Funding

0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$5.5M	$2.5M	$1.5M	$1.5M	$1.5M	$1.5M
Funded	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M
Delta	$5.5M	$2.5M	$1.5M	$1.5M	$1.5M	$1.5M

- **Discuss Funding Status**
  - **NKO afloat (103 ships) 4th Qtr FY06**
  - **NKO afloat (remaining ships) 4th Qtr FY07**

- **FY06-07 Risk Assessment – High**

- **Submitted as Priority 2 of 3 Unfunded Issues**
  - **Unfunded per new Distance Support Schedule**

IA O&MN Funding

3B1K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$6.6M	$6.7M	$7.4M	$7.6M	$7.7M	$7.9M
Funded	$6.6M	$6.7M	$7.4M	$7.6M	$7.7M	$7.9M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - **Majority of IA dollars are in 3B1K NPDC Base**
  - **Requirement by NETWARCOM to track IA requirements**
  - **NETC retain $.5M for enterprise efforts identified by NNWC DAA Governance Board**
- **FY06-07 Risk Assessment – Low**

LMS

3B4K-EL	FY06	FY07	FY08	FY09	FY10	FY11
Required	$4.2M	$4.9M	$5.6M	$6.5M	$7.4M	$8.6M
Funded	$4.2M	$4.9M	$5.6M	$6.5M	$7.4M	$8.6M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - Increased costs in FY06-11 relate to licensing renewal, integration with LCMS, SMS, various databases and expansion of ILE infrastructure to meet increased user base
- **Potential Initiatives to Reduce Program Costs**
  - Recompete LMS contract, evaluating products and industry developments that have occurred since initial ILE rollout that may increase ROI
  - Focus on tighter LCMS integration
- **FY06-07 Risk Assessment – Medium**
  - LMS is the key component integral to ILE success
  - Recompete could result in increased short-term risks
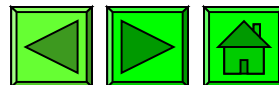
LCMS

3B4K-EL	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Required	$1.7M	$1M	$3.7M	$4.2M	$4.9M	$5.6M	$6.5M	$7.4M
Funded	$1.7M	$1M	$3.7M	$4.2M	$4.9M	$5.6M	$6.5M	$7.4M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - Increased costs in FY06-11 relate to licensing renewal, integration with LMS, Navy-required customizations, and performing recompete study
- **Potential Initiatives to Reduce Program Costs**
  - Recompete LCMS contract, evaluating products and industry developments that have occurred since initial ILE rollout that may increase ROI
  - Focus on SCORM, AICC compliance and content reusability
  - Analyze strategy and policy of LCMS/LMS integration
- **FY06-07 Risk Assessment – High**
  - LCMS is intended to be the repository for ILE; problems with the LCMS could impact reusability, integration efforts and increase training and
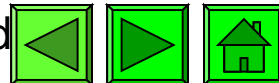
5VM

3B4K-AC	FY06	FY07	FY08	FY09	FY10	FY11
Required	$1.1M	$1.2M	$1.3M	$1.4M	$1.5M	$1.5M
Funded	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M
Delta	$1.1M	$1.2M	$1.3M	$1.4M	$1.5M	$1.5M

- **Discuss Funding Status**
  - **Costs include server refresh and operations**
  - **Additional hidden costs for 5VM integration**
- **Potential Initiatives to Reduce Program Costs**
- **FY06-07 Risk Assessment – Low**

NTIP Link O&MN Funding Summary
($M)

0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$0.5M	$0.2M	$0.2M	$0.2M	$0.2M	$0.2M
Funded	$0.2M	$0.2M	$0.2M	$0.2M	$0.2M	$0.2M
Delta	$0.3M	$0M	$0M	$0M	$0M	$0M

- **Enterprise authoritative data source for facilities**
- **Discuss Funding Status (*RSIP Program Fund Transfer FY06 & Out)**
  Increased costs in FY06, FY07 for interfaces, maintenance & expansion of system.
  - Initial development of interfaces with CETARS, TAMS, BTS, etc. increases costs; however, savings can be achieved by reducing duplicative databases and data entry in multiple applications.
  - Require additional manpower for admin/DBA/web support
- **Potential Initiatives to Reduce Program Costs**
  - Study the impact of sharing servers
  - Study the impact of restructuring existing facilities applications
- **FY06-07 Risk Assessment** – **Low**
  - Delay will impact BTS scheduling initiative

COMPUTER OPERATIONS
Analysis Results

- **Defined**

- **Validate Mission Requirement**

- **Define End Products**

- **Demand Basis for Input Plan**

- **Develop Production Capability**

- **Measure Output Quality**

INPUT PLAN
Program Area – Computer Operations

- **Overall Assessment Drivers**
  - **24/7 Computer operations support**
  - **NMCI mandated (Training COI connectivity, user desktop)**
  - **Electronic training delivery methods**
  - **Data Center infrastructure determined by demand**
- **Improvement Opportunities**
  - **Server consolidation**
  - **New NMCI policy to accommodate T&E requirements**
  - **State of the art server monitoring tools**
- **Risk – Medium**
  - **Interdependency among IT products**
  - **Unknown technology based on contractor claims**

PRODUCE REQUIRED OUTPUT
Program Area – Computer Operations

- **Overall Assessment**
  - Consolidated Help Desk
  - 24/7 application availability
  - Sufficient legacy servers for quick response
- **Improvement Opportunities**
  - **Factors Which Impact Product Definition**
    - NMCI constraints
    - Increased Information Assurance requirements
    - Emergent Requirements
    - Changing Environment
    - Lack of clear and concise business rules
  - **Address Potential Reductions in Capacity and Infrastructure**
    - Server consolidation
    - Reduce 24/7 support capability
    - New technology
- **Risk – Medium**
  - Interdependency among IT products
  - Unknown technology based on contractor claims

O&MN

COMPUTER OPERATIONS
O&MN Funding Summary

0804771N / 3B4K	FY06	FY07	FY08	FY09	FY10	FY11
Required	$0.8M	$0.9M	$1M	$1.1M	$1.2M	$1.3M
Funded	$0.8M	$0.9M	$1M	$1.1M	$1.2M	$1.3M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - **Costs shown are for labor**
    - **Hardware costs are shown in the IT Infrastructure section**
- **Potential Initiatives to Reduce Program Costs**
  - **Server consolidation**
  - **Reduce 24/7 support capability**
  - **New technology**
- **FY06-07 Risk Assessment – Medium**
  - **Interdependency among IT products**
  - **Unknown technology based on contractor claims**
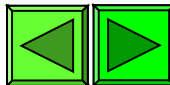
HELP DESK / TECHNICAL SUPPORT

	FY06	FY07	FY08	FY09	FY10	FY11
Required	$0.8M	$0.9M	$1M	$1.1M	$1.2M	$1.3M
Funded	$0.8M	$0.9M	$1M	$1.1M	$1.2M	$1.3M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - **Costs shown are for contractor support**
  - **Costs for help desk software included in TAMS submission**
- **Potential Initiatives to Reduce Program Costs**
  - **Consolidation of other Claimancy help desks**
- **FY06-07 Risk Assessment – Low**

PROJECT MANAGEMENT
Analysis Results

- **Defined**

- **Validate Mission Requirement**

- **Define End Products**

- **Demand Basis for Input Plan**

- **Develop Production Capability**

- **Measure Output Quality**

INPUT PLAN
Program Area – Project Management

- **Overall Assessment**
  - **Acquisition strategy & policy**
  - **Approved Project Management plan**
  - **Other Echelon II requirements and constraints**
  - **Priorities established by Claimancy goals and objectives**
- **Improvement Opportunities**
  - **Cultivate better communication**
  - **Provide Claimancy policy and guidance**
- **Risk - Medium**
  - **Define Risks of Inaccurate Input Projections**
    - **Changing requirements impact project execution**

PRODUCE REQUIRED OUTPUT
Program Area – Project Management

- **Overall Assessment**
  - **Requirements met on time and under budget**
- **Improvement Opportunities**
  - **Training**
  - **Timely and specific requirements**
- **Risk – Medium**
  - **Shortage of resources to adequately manage and support increased requirements**

O&MN

PROJECT MANAGEMENT
O&MN Funding Summary

	FY06	FY07	FY08	FY09	FY10	FY11
Required	$4.5M	$4.5M	$4.5M	$4.5M	$4.5M	$4.5M
Funded	$4.5M	$4.5M	$4.5M	$4.5M	$4.5M	$4.5M
Delta	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M	$0.0M

- **Discuss Funding Status**
  - **Costs above include Project Management labor**
- **Potential Initiatives to Reduce Program Costs**
  - **Improve efficiency through training**
- **FY06-07 Risk Assessment – Medium**
  - **Shortage of resources to adequately manage and support increased requirements**

ISSUE 1: Title

O&MN	FY06	FY07	FY08	FY09	FY10	FY11
Required	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**
Funded	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**
Delta	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**	**$0.0M**

- **Description**
  - **Consists of Manpower, Contracts, Equipment, Supplies, Travel … Shortfalls**
- **Capability at Current Funding**
  - **Production versus Requirement**
- **Alternatives at Current Funding Levels**
  - **Impact / Risk to Whom**

ILE Strategy

Vision: Support the entire Navy by designing and deploying content to the right people, at the right time and place.

- ✓ **A family of systems when integrated will provide an ability to:**
  - ✓ **Provide training anytime via the Internet**
  - ✓ **Diagnose a learner's strengths and weaknesses**
  - ✓ **Create an individualized learning plan**
  - ✓ **Track learner performance**
  - ✓ **Schedule blended training events**
  - ✓ **Schedule infrastructure and training assets**
  - ✓ **Inventory schoolhouse assets**
  - ✓ **Maintain records and produce reports on individual performance and mission/unit readiness**
  - ✓ **Automate evaluation system relative to learner satisfaction, performance in course, performance on job and ROI**

Integrated Learning Environment (ILE) Network Architecture
Production Environment

Notes:
- For Official Use Only, Not for distribution.

NMCI

Great Lakes Region COI
San Diego Region COI
Norfolk Region COI
Corpus Region COI
Pensacola COI

NMCI User Seats

NMCI B1
NMCI B2

ITC SPAWAR
CMS Server
Cisco VPN

NIPRNET

INTERNET

COOP Site
Bldg 741
NAS Pensacola

Norfolk Region Legacy
Great Lakes Region Legacy
Corpus Region Legacy
San Diego Region Legacy

Cisco 7513 Router
Cisco 3750
Redundant Core Switching Suite
Cisco 6509
Cisco 6509
Redundant Secure Content Accelerator (SCA)
Cisco 11506 SCA

Cisco VPN
Cisco PIX Redundant Firewall
Outside Screening Router
Cisco 3750
Cisco 3750

NKO

NKO IM 1 Sun 280 R
NKO IM 2 Sun 280 R
NKO Web 1 Sun 280 R
NKO Web 2 Sun 280 R
NKO Bantu 1 Sun 280 R
NKO Bantu 2 Sun 280 R
NKO Bantu 3 Sun 280 R
NKO Bantu 4 Sun 280 R
NKO MGT 1 Sun 280 R

LMS
Cisco 2950T
Admin Servers Load Balanced
PENS2212 Admin Web 1 Dell PE2650
PENS2210 Admin Web 2 Dell PE2650
PENS2211 Admin App 1 Dell PE2650
PENS2209 Admin App 2 Dell PE2650
PENS2105 ELWS Server Dell PE2650
PENS2106 ELWS Server Dell PE2650
PENS2107 ELWS Server Dell PE2650
PENS2210B ELWS Server Dell PE2650

Content Servers Load Balanced
PENS22102 Content Server Dell PE6650
PENS22103 Content Server Dell PE6650
NEW PENS22100 Streaming Media Server Dell PE1750
NEW Streaming Media Server Dell PE1750
NEW Navy Custom Content Server Dell PE6650
NEW Navy Custom Content Server Dell PE6650

PENS2250B Web / App Server Dell PE2650
PENS22095 Web / App Server Dell PE2650
PENS2250S Web / App Server Dell PE2650
PENS22096 Web / App Server Dell PE2650
PENS2250G Web / App Server Dell PE2650
PENS22097 Web / App Server Dell PE2650
PENS22507 Web / App Server Dell PE2650
PENS2209B Web / App Server Dell PE2650
PENS2250B Web / App Server Dell PE2650
PENS22099 Web / App Server Dell PE2650
PENS2250L SQL Cluster Node 1 Dell PE6650
PENS22502 SQL Cluster Node 2 Dell PE6650
Virtual SQL Cluster

PENS22104 LMS Reporting / SVM Mining LMS Replicated Database Dell PE6650

LCMS
PENS0259 App Server Dell PE6650
PENS22113 App Server Dell PE6650
PENS13692 Database Server SQL Cluster Node 1 Dell PE6650
PENS1149B Database Server SQL Cluster Node 2 Dell PE6650
Virtual SQL Cluster

Skillsnet (SMS)
PENS2209B SQL Cluster Node 1 Dell PE2650
PENS22096 SQL Cluster Node 2 Dell PE2650
Virtual SQL Cluster

SVM
PENS22087 Web Cache 1 Dell PE2650
PENS22088 Web Cache 2 Dell PE2650
Oracle Cluster Farm
OC4J Cluster 1
PENS22083 OC4J App 1 Dell PE2650
PENS22084 OC4J App 2 Dell PE2650
OC4J Cluster 2
PENS22085 OC4J App 3 Dell PE2650
PENS22086 OC4J App 4 Dell PE2650
PENS22081 Oracle DB Cluster Node 1 Dell PE2650
PENS22082 Oracle DB Cluster Node 2 Dell PE2650
PENS22090 Virtual Oracle Cluster

NETC SDE
PENS22091 Oracle Cluster Node 1 Dell PE2650
PENS22092 Oracle Cluster Node 2 Dell PE2650
Virtual Oracle Cluster

Private IP Space
ENG 01 Dell PE2650
NKO DB Cluster 1 Sun 280 R
NKO DB Cluster 2 Sun 280 R
ENG 2 Sun 280 R
ENG 3 Sun 280 R
NKO Audit 1 Sun 280 R
NKO APP 01 BEA Cluster MGT Sun 280 R
NKO MGT 02 Sun 880 R
NKO Verity Sun 880 R
NKO Spare Sun 880 R

Private IP Space
NKO APP 02 Sun 880 R
NKO APP 03 Sun 880 R
NKO APP 05 Sun 880 R
NKO APP 06 Sun 280 R
NKO BKUP Sun 280 R

PENS22240 Dell PV775 NAS Cluster Node 2 Dell PE2650
PENS22241 Dell PV775 NAS Cluster Node 1 Dell PE2650
Virtual NAS

Brocade 3800 Fiber Switch
Brocade 12000 Core Fiber Switch
Brocade 3800 Fiber Switch

Storage Array Network
SAN Disk
Mirrored to COOP Site
Dell CX600 SAN Storage Array
Dell CX600 SAN Storage Array
MirrorView Replication Link

CETARS
Automatic Tape Library Quantum P-4000

Legend
100MB TX
Giga Bit TX
Fiber Channel
Wide Area Connections
Training COI Connections
VPN Connection ITC SPAWAR
Secure Content Accelerator (SCA)
100Mbps Link to Sculley Field
Cisco 3750 1000 MB Router/Switch
Cisco 2950 100MB Switch
MirrorView Replication Link
Dell PE6650
Virtual SQL Servers
Dell PE6650
V-Series

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